In the Claims:

Please cancel claims 17-20 without prejudice, amend claims 1, 4, and 15-16 and add new claims 21-22 as follows:

1.   (Currently amended) A texturing apparatus for a recording medium substrate, comprising:

a rotational spindle supported for rotation in an attitude perpendicular to a predetermined datum plane;

a contact member supported for movement in a radial direction of the rotational spindle along the datum plane;

a drive connected to the rotational spindle and varying a rotation rate of the rotational spindle;

an urging force adjuster connected to the contact member and applying a~n~_a variable urging force to the contact member toward a surface of the recording medium substrate; ~and~

a supply unit supplying the contact member with an abrasive liquid including abrasive grains; and

a controller connected to ~the drive and~ the urging force adjuster and controlling ~the drive and~ the urging force adjuster ~so that a ratio between a relative velocity and the urging force of the contact member is maintained constant,~ for varying the urging force so as

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to keep a thickness h of the abrasive liquid between the contact member and the recording medium substrate constant in accordance with the following expression:

$(h/R) = (4.89\eta u)/(w/L)$,

wherein ~~the relative velocity is defined between the contact member and the surface of the recording medium substrate~~ R denotes a radius of the contact member, η denotes a viscosity of the abrasive liquid, u denotes a relative velocity between the contact member and the recording medium substrate, w denotes the urging force of the contact member, and L denotes a length of a linear contact between the contact member and the recording medium substrate.

2.   (Original)   The texturing apparatus according to claim 1, further comprising a vibrator connected to the contact member so as to reciprocate the contact member by a predetermined amplitude along the radial direction.

3.   (Cancelled)

4.   (Currently amended) A method of texturing a substrate for a recording medium, comprising:

applying an urging force to a contact member toward a surface of the substrate of a disk-shape rotating around a rotational spindle;

moving the contact member in a radial direction of the substrate; ~~and~~

supplying the contact member with an abrasive liquid including abrasive grains; and

~~maintaining a predetermined ratio between a relative velocity and the urging force of the contact member,~~ varying the urging force so as to keep a thickness h of the abrasive liquid between the contact member and the substrate constant in accordance with the following expression:

$(h/R) = (4.89\eta u)/(w/L)$,

wherein ~~the relative velocity is defined between the contact member and the surface of the substrate~~ R denotes a radius of the contact member, η denotes a viscosity of the abrasive liquid, u denotes a relative velocity between the contact member and the recording medium substrate, w denotes the urging force of the contact member, and L denotes a length of a linear contact between the contact member and the recording medium substrate.

5.   (Original) The method of texturing according to claim 4, further comprising reciprocating the contact member in contact with the substrate by a predetermined amplitude along the radial direction.

6-14. (Cancelled)

15.   (Currently amended)   ~~An~~The texturing apparatus ~~designed to texture a substrate of a recording medium, comprising:~~according to claim 1,

~~a rotational spindle supported for rotation in an attitude perpendicular to a predetermined datum plane, said rotational spindle receiving the substrate;~~

~~a contact member supported for movement in a radial direction of the rotational spindle along the datum plane; and~~

~~a drive connected to the rotational spindle so as to vary a rotation rate of the rotational spindle in response to movement of the contact member,~~

wherein the movement of the contact member causes a texture spreading over a surface of the substrate.

16.   (Currently amended) The apparatus according to claim 15, wherein the movement of the contact member causes the texture, which comprises stripes of fine scratches, and a cross angle ~~is~~being defined between intersecting ones of the stripes of fine scratches.

17-20. (Cancelled)

21.   (New)   A texturing apparatus for a recording medium substrate, comprising:

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a rotational spindle supported for rotation in an attitude perpendicular to a predetermined datum plane;

a contact member supported for movement in a radial direction of the rotational spindle along the datum plane;

a drive connected to the rotational spindle and varying a rotation rate of the rotational spindle;

an urging force adjuster connected to the contact member and applying an urging force to the contact member toward a surface of the recording medium substrate;

a supply unit supplying the contact member with an abrasive liquid including abrasive grains; and

a controller connected to the drive and the urging force adjuster and controlling the drive and the urging force adjuster all along the radial direction according to the following expression:

$(h/R) = (4.89\eta u)/(w/L)$,

wherein h denotes the thickness of the abrasive liquid between the contact member and the substrate, R denotes a radius of the contact member, η denotes a viscosity of the abrasive liquid, u denotes a relative velocity between the contact member and the recording medium substrate, w denotes the urging force of the contact member, and L denotes a length of a linear contact between the contact member and the recording medium substrate.

22.   (New)   A method of texturing a substrate for a recording medium, comprising:

rotating the substrate around a rotational spindle at a rotation rate;

applying an urging force to a contact member toward a surface of the substrate;

moving the contact member in a radial direction of the substrate;

supplying the contact member with an abrasive liquid including abrasive grains; and

controlling the rotation rate and the urging force adjuster all along the radial direction according to the following expression:

$(h/R) = (4.89\eta u)/(w/L),$

wherein h denotes the thickness of the abrasive liquid between the contact member and the substrate, R denotes a radius of the contact member, η denotes a viscosity of the abrasive liquid, u denotes a relative velocity between the contact member and the recording medium substrate, w denotes the urging force of the contact member, and L denotes a length of a linear contact between the contact member and the recording medium substrate.